REMARKS

The Examiner rejected all pending claims as being obvious over Cravino et al., J. Mater. Chem., 2002, 12, 1931-1943 ("Cravino") in view of Sentein et al., Optical Materials, 9 (1998) 316-322 ("Sentein") and in view of Zhao et al., Polymer, 1995, 36(11), 2211-2214 ("Zhao") with supporting evidence provided by Dittmer et al., Adv. Mat., (2000), 12(7), 1270-1274 ("Dittmer") and further in view of Gebeyehu et al., Intl. J. Photoenergy, 1999, 1, 1-5 ("Gebeyehu").[1] In particular, the Examiner said:

> It would have been obvious to one of ordinary skill in the art at the time of the invention to use the fullerene/polymer system of Sentein in C[ra]vino because fullerenes have an extended delocalized rr-electron source and lead to the cost effective fabrication of flexible large area solar cells, as taught by Sentein (section 1, ¶1). Office Action, p. 4

Respectfully, Applicants find the Examiner's statement confusing. Applicants are unsure what the Examiner intends by "delocalized rr-electron source". Applicants believe the Examiner may have intended to write "delocalized π-electron source." If this is what the Examiner intended, Applicants do not concede that the Examiner's statement is true. If the Examiner intended something else, Applicants seek clarification on this issue. Either way, it is improper for an Examiner to simply assert a fact, such as has been done here regarding the type of "electron source" (whatever that means) that fullerenes allegedly are, without appropriate evidence. M.P.E.P. §2144.03.

Sentein discloses orientation induced molecular rectification in certain polymers. Sentein, Title. According to Sentein, these polymers form a "new type of junction" and are "an alternative" to systems that involve a p-type material and a separate n-type material to form a junction. *Id.*, section 1, 1st and 2nd paragraphs. As would be understood by one skilled in the art, Cravino discloses such a junction. *See* Cravino *passim*. In particular, Sentein does not disclose using his electric field method in a junction that contains a fullerene and a polymer. Rather, according to Sentein, his method of applying a field is based on the particular oriented polymer materials he discloses. *See, e.g.,* Sentein, Abstract, section 1, 2nd paragraph. Sentein says that

[1] Applicants do not concede that the Examiner has accurately characterized the subject matter covered by any of the pending claims or the subject matter disclosed by Cravino, Sentein, Zhao, Dittmer or Gebeyehu.

his polymer materials contain a polar molecule that has a "donor/transmitter/acceptor structure [that] possesses a large ground state dipole moment." *Id.*, section 2. As would be understood by one skilled in the art, in stark contrast to Sentein, Cravino discloses a junction which contains a p-type material, a separate n-type material, and no material that serves as a donor/transmitter/acceptor in the sense referred to by Sentein. Thus, even if one skilled in the art had somehow wanted to modify Cravino and for some reason had read Sentein, that person would not have modified Cravino based on Sentein in the manner stated by the Examiner. Neither Zhao nor Gebeyehu, alone or in combination, cure the above-noted deficiencies of the Examiner's rejection.

It would not have been obvious to one skilled in the art to combine the references in the manner indicated by the Examiner to provide the subject matter covered by any of the claims. Even if the references were so combined, which Applicants do not concede would have even been possible, the result would not have been the subject matter covered by any of the claims. Applicants therefore request reconsideration and withdrawal of the rejection of the claims.

Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: March 16, 2009

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